

ABSTRACT OF THE DISCLOSURE

A system which allows multiple senders to asynchronously transmit identification codes via a common communication channel (e.g., RF) to enable a central monitor to identify the presence (or absence) of each sender within the monitor's detection zone. Each sender is configured to repeatedly transmit a uniquely encoded identification frame. A frame, in accordance with the invention, is comprised of pulses spaced to minimize pulse collisions and configured to tolerate occasional collisions without impairing the monitor's ability to separately identify each transmitting sender.

Each sender is configured to repeatedly transmit a unique identification frame characterized by a pulse pattern comprised of active intervals spaced by inactive (or "quiet") intervals. The inactive intervals have variable length durations which are preferably pseudorandomly selected so that each sender defines a unique sequence of inactive interval durations.

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